Floor Mapping: A Novel Method of Integrating Anatomical Structure with Immunological Function

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FLOOR MAPPING: A NOVEL METHOD OF INTEGRATING ANATOMICAL STRUCTURE WITH IMMUNOLOGICAL FUNCTION

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Aims

It is well known that students will vary in their preferred learning style and that older traditional methods of immunology teaching (such as didactic lectures) can fail to engage students, particularly those that are kinaesthetic learners. Anatomy forms the cornerstone of many medical degree programmes. However, anatomy is often taught in isolation from the processes, such as immunology, that occur within the structures that are under review. Immunology can also be a challenging subject for medical students; its complex, overlapping processes can make it difficult to conceptualise and apply clinically (1). Our aim was to design a teaching session that integrated structure and function yet appealed to a variety of learning styles.

Methods

We describe a novel integrated anatomy/immunology teaching method used in the Graduate Entry Medical course in Swansea, UK, where we linked the structure of the lymph node to its immunological function within the body. The floor of our clinical skills lab was converted into a large labelled diagram of a lymph node. Our year 1 students became the B and T cells and, with the aid of interactive white boards, we walked and talked through the processes that occur when an immune response is stimulated.

Results

Student feedback suggested that the session was extremely well received by the students. We reflected on the teaching session in terms of its stimulation of the different VARK learning styles namely visual, aural, read/write and kinaesthetic (2). We found that the session catered for students with a multimodal learning style and specifically included a kinaesthetic element. Whilst we are yet to assess the preferred learning styles of our own students, studies on medical students indicate they often exhibit multimodal learning (3,4) that becomes increasingly unimodal and kinaesthetic after they qualify (4). We will discuss this in relation to our curricular structure and general student profile.

Conclusion

Current trends in medical education are moving away from didactic lectures to more active methods of learning. The evaluation of this novel teaching method shows that not only can teaching of basic sciences such as immunology be integrated into anatomy sessions but also that the method of delivery can be engaging, multimodal and potentially stimulates active learning. In addition, the use of a cross-disciplinary teaching team is likely to further reinforce the student perception of the body and its processes as a single integrated entity.